

The City of Seattle has identified infrastructure improvements that were recently constructed or for which funds are secured for construction in the near future. These improvement projects (summarized in Table 11) fall into three major categories: rehabilitation, signal synchronization, and lane channelization. Figure 22 shows where these improvements are located within Southeast Seattle.

### 3.1 Review of City's Identified Needs for Southeast Seattle

*Conclusion:*

- The City of Seattle has identified the need for various types of infrastructure improvement projects within Southeast Seattle, including widening, paving and signal/Intelligent Transportation Systems (ITS)

The following projects are currently funded in the Capital Improvement Program (CIP) and other Seattle Department of Transportation (SDOT) programs.

#### 3.1.1 Identified CIP Projects

- S. Henderson Street (between Renton Avenue S. and Seward Park Avenue S.): Widening sidewalks, adding bike lanes, adding street lights and landscaping, and potentially adding bus pads.  
*Status: This project will be constructed by 2008*
- Chief Sealth Trail: The current phase constructs trail improvements for 3.6 miles along a Seattle City Light corridor from S. Dawson Street to S. Gazelle Street  
*Status: SDOT is currently designing connections with local intersections/arterials*
- Rebuild M.L. King Jr. Way S. from Rainier Avenue S. to the southern city limit to include light rail.  
*Status: This project is currently under construction*

#### 3.1.2 Other SDOT Projects

- Intersection improvements for pedestrian safety on Beacon Avenue S./17<sup>th</sup> Avenue S./S. Forest Street  
*Status: In design and will be constructed in 2005*
- Sidewalk improvement on 42<sup>nd</sup> Avenue S. between S. Hudson Street and S Dawson Street  
*Status: Will be constructed in 2005*
- Median enhancements along Rainier Avenue S. from 57th Avenue S. to the city limits (to complement the restriping that occurred in 2004)  
*Status: In progress*

#### 3.1.3 SDOT's Paving Needs

As part of SDOT's identified 2005 – 2007 paving needs, a segment of Lake Washington Blvd. S./Lakeside Avenue S. would be repaved from approximately Lake Park Drive S. to Lake Washington Blvd. S. (the Colman Park Entrance). This paving is projected to be completed in 2006.

### **3.1.4 SDOT's Traffic Signal and Intelligent Transportation System Needs**

Intelligent Transportation Systems (ITS) use electronic technology to improve safety, mobility (relieve congestion), and productivity. ITS elements can provide information to drivers, and can be integrated into the transportation system's infrastructure and into vehicles themselves.

A primary focus of ITS is to provide low-cost alternatives to traditional capital projects. ITS uses various tools to maximize the capacity of existing facilities as opposed to building new facilities. Investments in ITS are relatively small compared to the benefits.

ITS elements and tools help reduce environmental impacts. Optimization of signals can result in a 50:1 benefit-cost improvement when comparing costs to fuel savings.

ITS needs in the study area are defined as follows:

*South Seattle ITS - \$5M total need, \$2.8M in Strategic ITS Network:* The area is defined by S. Jackson Street to the north, the southern city limits, Lake Washington to the east, and I-5 to the west. The strategic ITS arterial network is comprised of S. Jackson Street, Rainier Avenue S., and M.L. King Jr. Way S. This ITS project would involve:

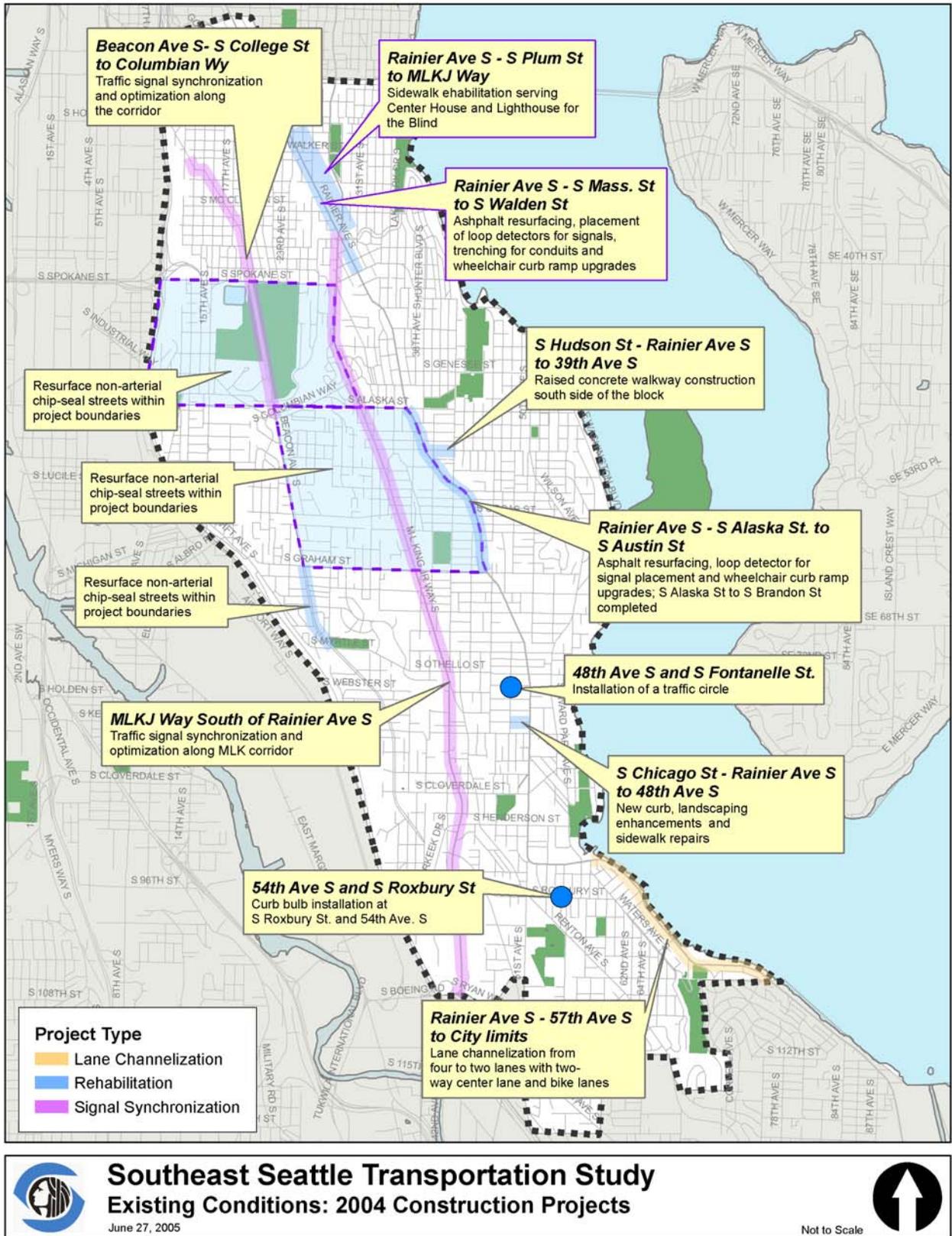
- Upgrading signal controllers/cabinets as needed, to allow for a coordinated system, bus priority, and advanced intersection operations.
- Communication links as needed, to connect signalized intersections to the Traffic Management Center (TMC) and the Central Signal System.
- Traffic cameras for monitoring conditions and providing images to SDOT's website (for traveler information).
- Dynamic Message Signs as needed, to provide timely information to motorists.
- Data stations for collecting traffic data that would be used to provide a real-time traffic conditions flow map and incident detection. Data would also be used for planning and performance measure purposes.
- Detection to ensure efficient street operation. Detection would be used for time-of-day, traffic-responsive, or traffic-adaptive operations.
- Transit Signal Priority where appropriate, to provide travel time and reliability advantages for transit. Queue jumps would also be considered.
- Emergency Vehicle Priority at all signalized intersections, to assist in timely delivery of emergency services.
- Accessible pedestrian push buttons and other advanced pedestrian detection devices, as appropriate.
- A particularly high level of operations and maintenance is needed to support the light rail corridor.

This South Seattle ITS project is currently identifying funding opportunities.

**Table 11: Funded Infrastructure Improvements in Southeast Seattle**

<b>Rehabilitation</b>	<b>Description</b>	<b>Status</b>
Rainier Ave. S., between S. Plum St. & S. Bayview St.	Sidewalk will be rehabilitated at this location, serving Center House and Lighthouse for the Blind	Completed
S. Hudson St., between Rainier Ave. S. & 39th Ave. S.	A raised concrete walkway will be constructed on the south side of the block	Completed
Rainier Ave. S. from S. Alaska St. to S. Austin St.	Includes asphalt resurfacing, loop detector placement, and wheelchair curb ramp upgrades. Rainier Ave. S. from S. Alaska St. to S. Brandon St.	Completed
Annual Chip-Seal Paving Program	This project will resurface non-arterial chip-seal streets within the project boundaries	Completed
S. Chicago St., between Rainier Ave. S. & 48th Ave. S.	This project includes a new curb, landscaping enhancements, and sidewalk repairs.	Completed
Rainier Ave. S. from S. Massachusetts St. to S. Walden St.	Removal of asphalt resurfacing, placement of loop detectors for signals, trenching for conduits, placement of conduits, and wheelchair curb ramp upgrades	Completed
48th Ave. S. & S. Fontanelle St.	A traffic circle will be installed at this intersection	Completed
S. Roxbury St. & 54th Ave. S.	This project will install curb bulbs at this intersection.	Completed
<b>Signal Synchronization</b>		
M.L. King Jr. Way S., south of Rainier Ave. S.	The traffic signals along this corridor will be re-timed, or synchronized, to create smoother and quicker trips for traffic, with maximum green-light time and will improve traffic flow in corridors throughout Seattle	On-going (respond to LRT station)
Beacon Ave. S. from S. College St. to S. Columbian Way	The traffic signals along this corridor will be re-timed, or synchronized, to create smoother and quicker trips for traffic, with maximum green-light time and will improve traffic flow in corridors throughout Seattle.	Under review for impact for LRT construction
<b>Lane Channelization</b>		
Rainier Ave. S. (city limits to 57th Ave. S.)	This project will modify the lane channelization in this area from four lanes to two lanes with a two-way center turn lane and bike lanes	Completed

Figure 1: Recent Construction Infrastructure Improvement Projects



## 3.2 Making the Parking System Work Program

*Conclusion:*

- *The City of Seattle has addressed many of the community's parking needs in Columbia City and Beacon Hill. Several longer-term issues still need to be addressed.*

### 3.2.1 Parking Implementation Plan Recommendations for Columbia City and Beacon Hill

Through the *Making the Parking System Work* program, the Seattle Department of Transportation responds to emerging parking, mobility, and access issues that affect a neighborhood-wide area. City staff collaborated with neighborhood business and community organizations to identify and implement low-cost, common-sense parking management and access strategies. Two Southeast Seattle neighborhoods, Columbia City and Beacon Hill, have participated in the program. These neighborhoods were chosen based on recommendations and data from various sources, including Neighborhood Plans, the results of the Comprehensive Neighborhood Parking Study (1998-1999), terms of the grant, and other transportation-related efforts.

Parking implementation strategies for Columbia City and Beacon Hill follow.

#### **Parking Implementation Strategy for Columbia City**

Members of Columbia City's Parking Workgroup and SDOT's *Making the Parking System Work* program developed the *Columbia City Parking Action Strategy* between April 2002 and September 2003. Short-term, mid-term and long-term goals were developed. A neighborhood survey and walking tour were also conducted in Columbia City (2003) with community members, which resulted in parking recommendations.

##### Columbia City Parking Action Strategy

The short-term, overall goal is to make more parking available for short-term customer parking. Table 12 describes the short-term goals developed by the Workgroup and the implementation progress to date.

The mid- and long-term goals developed by the Workgroup are presented in Table 13. In the mid-term, the goals are two-fold: 1) Make the best use of existing off-street parking, and 2) create programs that educate visitors and clients about parking opportunities and encourage ways to reduce drive-alone trips to area businesses, events, and services. For the long term, the emphasis is on increasing the parking-related resources available to the business community and monitoring the development of the agreement between the City of Seattle and Sound Transit regarding the Columbia City/S. Edmunds Street Station.

##### Columbia City Neighborhood Survey

Table 14 presents the neighborhood survey's top two priorities for each user type. The user types included business owners, customers and visitors, employees, and residents who live and work in the neighborhood. The City of Seattle also conducted a walking tour with community members where several recommendations were provided. Please refer to the project matrix (Appendix A) for a list of recommendations from the walking tour.

**Table 12: 2002/2003 Columbia City Short-Term Parking Goal and Status of Implementation**

<b>Goal</b>	<b>Strategy</b>	<b>Plan</b>	<b>Status</b>
Goal #1: Increase On-Street Parking	Convert parallel to angled parking on the south-side of S. Angeline St. east of Rainier Ave. S. (approximately nine spaces could be gained), and the south side of S. Ferdinand St. east of Rainier Ave S. (approximately eight spaces could be gained).	SDOT will typically convert parallel to angled parking when it receives a petition signed by 60% of the property owners on both sides of the block.	Pending community action
Goal #1: Increase On-Street Parking	Seek opportunities at Orca School: on 37th Ave S, between S. Edmunds St. and S. Ferdinand St., move parking to the west side of the street (adjacent to Orca) to increase the number of parking spots (there are no curb cuts on the west side of the street).	Orca School principal and adjacent businesses need to be contacted.	Completed.
Goal #1: Increase On-Street Parking	Educate Columbia City merchants about installing load zones to provide adequate delivery spaces and consolidating or eliminating under-used load zones to create parking spaces.	Load zones can typically be added or removed by adjacent business by calling SDOT at 684-ROAD.	Pending community action
Goal #1: Increase On-Street Parking	Investigate possible improvements to S. Hudson St. east of Rainier Ave. S. to improve pedestrian access on the south side of this block where back-in angled parking exists and intrudes into the pedestrian "desire line."	SDOT staff will investigate.	Completed. SDOT built a curb and sidewalk
Goal #2: Increase Enforcement for Short-Term Parking	Improve enforcement of existing laws (no parking on parkway on S. Hudson St. and S. Ferdinand St. east of 39th Ave. S. on weekend nights) and provide enforcement education materials to residents in areas where frequent abuses occur.	SDOT has communicated this information to the Seattle Police Department Parking Enforcement Officers (PEOs).	Pending community action on education effort
Goal #3: Increase Short-Term Parking Supply	The locations the workgroup recommended for adding time-limit signs include: on S. Ferdinand St., adjacent to businesses east of Rainier Ave. S.	SDOT will install time limit signs after receiving a petition signed by 60% of the property owners on both sides of the block.	Pending community action

**Table 12 (continued): Columbia City Short-Term Parking Goal and Status of Implementation**

<b>Goal</b>	<b>Strategy</b>	<b>Plan</b>	<b>Status</b>
Goal #3: Increase Short-Term Parking Supply	The locations the workgroup recommended for adding time-limit signs include: on S. Hudson St. within one block east and west of Rainier Ave. S.	SDOT will install time limit signs after receiving a petition signed by 60% of the property owners on both sides of the block.	Pending community action
Goal #3: Increase Short-Term Parking Supply	The locations the workgroup recommended for adding time-limit signs include: on S. 37th St. between S. Edmunds St. and S. Ferdinand St.	SDOT will install time limit signs after receiving a petition signed by 60% of the property owners on both sides of the block.	Pending community action
Goal #3: Increase Short-Term Parking Supply	The locations the workgroup recommended for adding time-limit signs include: on S. Edmunds St. adjacent to Orca School.	SDOT will install time limit signs after receiving a petition signed by 60% of the property owners on both sides of the block.	Pending community action
Goal #4: Install Parking Directional Signage	Install directional signage to direct customers and visitors to the supply of on- and off-street parking available off of Rainier Ave. S. in and near the downtown business core.	SDOT staff will oversee the location and installation of signs.	Completed

**Table 13: Columbia City Mid- and Long-Term Parking Goal**

	<b>Goal Number</b>	<b>Description</b>	<b>Status</b>
Mid-term	# 5 Develop Lot Sharing Opportunities	Look for lot-sharing opportunities between the library, post office, Columbia Plaza, Orca School and other neighborhood parking lots	Community will take lead
	# 6 Develop Marketing and Validation Programs	Educate library visitors and area businesses and events about parking opportunities, parking courtesy, and the many means of non-drive-alone transportation to and within Columbia City	Community will take lead
Long-term	# 7 Develop Business Access Package	Develop programs that provide the area's small businesses employees with tools and incentives for getting to work without using a car, or for making fewer drive-alone trips	Community will take lead
	# 8 Address Impacts from Future Developments	Investigate opportunities for purchasing community-owned or business/organization-owned parking lots, to replace existing off-street facilities as they are developed	Community will take lead
	# 9 Address Impacts from the Edmunds Light Rail Station Opening	Organize community members to monitor Sound Transit parking mitigation commitments for the estimated opening of the Columbia City/S. Edmunds Street Station in 2009	Will be completed around the opening of light rail in 2009

**Table 14: Results of Community Survey**

<b>User Type</b>	<b>Priorities</b>
Business Owner	Priority 1: Creating new on-street parking spaces where possible Priority 2: There is turnover within on-street parking spaces
Customers and Visitors	Priority 1: Impacts from special community events Priority 2: Impacts from the library expansion
Employees	Priority 1: Impacts from the library expansion Priority 2: Creating new on-street parking spaces where possible
Live and Work	Priority 1: Creating new on-street parking spaces where possible Priority 2: Impacts from the S. Edmunds Street Light Rail Station opening
Residents	Priority 1: Impacts from the library expansion Priority 2: Impacts from special community events

## **Parking Implementation Strategy for Beacon Hill**

The Beacon Hill community initiated the *Making the Parking System Work* program over the summer of 2003. SDOT staff conducted a walking tour with neighborhood representatives on July 29th, 2003 and determined that many of the community's concerns about parking issues were related to the Sound Transit test shaft and future station. The community is currently engaged in regular meetings with SDOT and Sound Transit project managers regarding impacts from Sound Transit activities in the neighborhood. A walking tour with the Asa Mercer Middle School Safety Committee was also conducted and parking recommendations were identified. Please refer to Appendix A (project matrix) for these recommendations.

SDOT staff created an inventory of parking issues and opportunities that are not related to Sound Transit impacts, and in October 2003 presented these to the community at a North Beacon Hill Community Council meeting. SDOT worked on these issues throughout 2004 and the status is presented in this section. The *Making the Parking System Work* program also funded a Beacon Hill neighborhood map showing biking, busing, and walking routes and items of local interest. This map should be available in late spring 2005.

### Key Beacon Hill Community Parking Issues

Issue: On-Street Parking: Investigate and resolve the conflicting placement of a bus stop and loading dock on the 2500 block (west side) of Beacon Avenue S.

A business adjacent to the bus zone on the west side of the 2500 block of Beacon Avenue S. operates a forklift on the sidewalk in a way that disturbs pedestrians, and delivery trucks sometimes park in the bus zone while unloading.

*Status: SDOT has met with businesses and developed action steps. SDOT has located a load zone on 15th Avenue South for the adjacent businesses to use, and the business that operated the forklift has moved to a new location.*

Issue: Support efforts to improve access and increase pedestrian safety around Asa Mercer Middle School.

Access to Asa Mercer Middle School (1600 S. Columbian Way) is impacted by less than ideal traffic circulation and drop-off/pick-up locations on the school lot and on 16th Avenue S. (which runs along the side of the school). Students walking to and from school also have to navigate sometimes challenging situations.

*Status: SDOT has completed a number of immediate improvements such as installing speed limit signs on 15<sup>th</sup> Avenue S. and increasing pedestrian*

*crossing time at the signal across S. Columbian Way at the Veteran's Hospital drive. SDOT also helped the community develop an initial needs list that should be addressed through a transportation study of the school facilities and immediate streets and intersections.*

### **3.2.2 Existing Transportation Demand Management (TDM) Strategies**

**Conclusions:**

- *Several successful TDM programs have been implemented in Southeast Seattle, including King County Metro's In Motion program and the Resident Transportation Program (RTC).*
- *Flexcar is an on-going program that has five vehicles located throughout the Southeast Seattle community.*

The Southeast Seattle community has implemented several Transportation Demand Management (TDM) strategies. TDM strategies are also referred to as *mobility management*. These strategies range from policy implications, such as encouraging transit-oriented and high-density development, to the implementation of community programs that encourage residents to utilize other forms of transportation.

According to a thesis project entitled *Trip Reduction Strategies for Low-Income Households Report* (Sunny D. Knott, June 2003), low-income households generally employ heavy trip reduction. These households take about 20 percent fewer trips and their vehicle miles traveled (VMT) are 50 percent lower than other households. A likely reason for the lower VMT is that lower-income households usually travel to places closer to home and are much more likely to walk. Low-income families operate in a smaller geographic area, because of lack of access to a car or the prohibitive cost of travel. This thesis document discusses considerations that should be noted when developing trip reduction strategies for low-income neighborhoods, including:

- Low-income households are already engaged in significant trip reduction.
- Service related-jobs that require multiple destinations at odd hours are difficult to serve with transit.
- Several issues are related to transit, including poor bus service, the cost to use bus transportation, and safety concerns (discomfort waiting at bus stops or riding buses during odd hours).
- Cultural and language barriers.
- Differing roles for women may contribute to the types of transportation they feel comfortable utilizing.
- Women (or their husbands) may not feel comfortable riding in a carpool or vanpool with unfamiliar men and people who are not relatives.

- Community members may be distrustful of programs developed by a government agency that they have little experience with. They may also be distrustful of government in general.
- A prestige factor/status symbol is associated with owning a car.

In general, most vehicle trips are non-commute trips, so strategies that reduce the number of non-commute trips should be considered. Cross-town service or improved security on buses or at bus stops should also be considered.

Policy implications at regional and local levels can impact the Southeast Seattle study area. At a regional level, the Commute Trip Reduction Law (adopted in 1991) requires large employers (over 100 employees) in the area to utilize TDM strategies to reduce single-occupant vehicle (SOV) commutes to their worksite. Each worksite must meet specific goals and adjust their transportation plans if they do not meet their goal. Transportation plans vary from site to site, with the strength of the plan largely depending on the employer's commitment. Various government and non-profit agencies offer handbooks for developing effective commute trip reduction programs. The Flexcar program is another region-wide TDM program. The Flexcar program is described in the following section, in relation to the Southeast Seattle area.

The *One Less Car Challenge* is a city-wide program. This public education effort encourages Seattle households to make smarter transportation choices and save money by reducing the number of cars they own. Families are provided with financial incentives and information on the range of alternative transportation modes available (transit, busing, bicycling, and walking). They are “challenged” to live with one less car for a trial period of one month, or more permanently by selling their second (or even their only) car.

Recent community programs implemented in the study area include King County Metro's *In Motion* Pilot Program, the *Resident Transportation Coordinator* (RTC) pilot program, and the *Flexcar* program.

### **3.2.3 Past Pilot Programs**

#### **King County Metro's *In Motion* Pilot Program**

King County Metro recently developed a ten-week pilot program called *In Motion*. The Columbia City, Lake Forest Parkway, and Madison-Miller neighborhoods were chosen as sites for this program.

This ten-week program focused on educating community members on healthier travel options by using a unique community engagement strategy. Metro forms partnerships with local community stakeholders to champion and promote busing, biking, and walking in their neighborhood for several months. Metro arranges for neighborhood-specific marketing materials and provides free incentives (e.g., bus tickets and donated merchandise and/or services from local businesses) to encourage people to try non-auto travel modes. Within Columbia City, 296 community members participated and the end results included:

- 28 percent less driving alone
- 29 percent more busing
- 34 percent more carpooling
- 37 percent more walking
- 14 percent more bicycling

As part of this project, community members were offered Metro free-ride tickets, and they stated that this was a strong motivation to take the bus. The educational campaign listed transportation alternatives and the multitude of benefits associated with them. Improving health, building community, and reducing traffic congestion were listed as some of the major benefits.

King County Metro stated that the *In Motion* program's goal "is to provide education and incentives that encourage everyone in the neighborhood to travel in healthier ways for themselves and their community."

Posters throughout the neighborhood with slogans like "Hop on the bus, Russ" and "Cycle on, Juan" were part of Metro's successful Columbia City pilot program. Nearly 40 local merchants and the local Farmers' Market assisted in sponsoring the campaign. Residents who pledged to reduce their car use by two trips each week were rewarded with Metro free-ride tickets and other incentives that increased the longer they stuck with their pledges.

More information can be found on the King County Metro website <http://www.metrokc.gov/kcdot/transit/inmotion>.

### **Resident Transit Coordinator (RTC)**

The *Resident Transit Coordinator* program was a pilot project of The Neighborhood TDM Program, a collaboration between King County Metro, King County WorkSource Operators Consortium, SDOT, and Seattle and King County Housing Authorities. This program was designed to provide transit education to disadvantaged neighborhoods. The New Holly housing development had an RTC for six months in 2004.

A survey conducted of New Holly residents resulted in the following<sup>1</sup>:

- 76 percent of the residents have access to a vehicle
- 62 percent use a personal vehicle for commute work trips
- Influences on decisions about using transit include: frequency of service, distance of the stop from work or home, hours of existing service.

---

<sup>1</sup> *Assessment of Transportation Attitudes, Behavior and Needs among Residents of New Holly and Park Lane Homes and Customers of Worksource Renton*, Gilmore Research Group, April 2004

### **3.2.4 Existing On-Going Programs**

#### **Flexcar Program**

*Flexcar* is a Seattle-based car-sharing program operating throughout the nation. Within the Seattle metropolitan area, Flexcar is in partnership with King County Metro. Flexcar operates a diverse fleet that includes vehicles such as Honda Civic hybrids and Ford Ranger pickup trucks and luxury sedans.

The use of Flexcar helps to decrease traffic, relieve parking congestion, and reduce vehicle miles traveled. It is estimated that each Flexcar replaces six cars on the road.

Flexcar has also recently launched a new program called Flexcar Job Access. This low-income household program allows participants to use Flexcar free of charge to help with job searches or job training, obtain services from employment services agencies, and handle child care trips related to job-related challenges. To qualify, a participant must:

- Be a resident of a Seattle area low-income housing facility,
- Be a client of WorkSource, WorkFirst, or any other state, county or city employment assistance agency,
- Be enrolled in or applying to a job training program at an eligible institution,
- Meet the King County definition of low-income family, or
- Be a client of a city, county, or state social services agency such as DSHS.

Flexcar has also provided discount rental rates for job access program participants for personal use. As part of this program, Flexcar vehicles can also be used for any other purposes for a special rate of \$4.50/hour.

The following Flexcar locations are within the study area:

- Beacon Hill: 2701 Beacon Avenue S. (Red Apple Grocery Store)
- Beacon Hill: 2525 14<sup>th</sup> Ave. S.
- Columbia City: New Holly Community Center, 7050 32nd Ave. S.
- Mount Baker: 2811 Mount Rainier Drive S., near Mount Baker Community Club
- New Holly: 7050 32nd Ave. S., near New Holly Community Club

### **3.3 Safe Routes to Schools**

The *Safe Routes to Schools* program is a state-wide program that works with community members, local jurisdictions and the State to identify safe school walk routes. Please refer to Appendix E for maps illustrating each school walk route.